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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,996

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Shaily Verma

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11/10/2009

Robert D. Shedd, Patent Operations

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EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,996	Applicant(s) VERMA ET AL.	
	Examiner MELODY MEHRPOUR	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 5-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1-2, 5-18**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar et al. (US Publication 2003/0134638 A1) in view of Hurta et al. (US Publication 2004/0228347 A1).

Regarding claims 1, 11-12, 17, Sundar teaches a method for registering a Wireless Local Area Network (WLAN) as a cellular network routing area (0054), comprising the steps of:

determining a location of a service request from a user within a cellular network **which comprises a packet-based node** (0055, 0056, 0058);

determining whether the location is in or near a WLAN access point (0066);

while servicing the request using the WLAN such that interworking between the WLAN and the cellular network is provided (0065, 0057, 0067, 0097).

Sundar does not specifically teach a method wherein maintaining packet data protocol (PDP) context while servicing the request using the WLAN (during the handover) to a different network. However, Hurtta teaches a method wherein maintaining packet data protocol (PDP) context while servicing the request using external network that inter-working with the cellular network is provide. In case of handover, the new SGSN may check the APN OI received from the old SGSN in the PDP context information. The result will be maintaining the PDP context instead of sending it to the corresponding GGSN (S38), or deleting the PDP context instead of rejecting the request (S39) (0068). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Hurtta with Sundar, in order to provide battery conservation by reducing extra signaling, while seamlessly roaming between different networks.

Regarding claims 5, 14, Sundar teaches a method/system further comprising the step of setting a periodic routing area update timer value while in a WLAN coverage area to reduce signaling while a user is in the WLAN area (0063).

Regarding claim 6, Sundar teaches a method as recited in claim 1, further comprising the step of establishing packet switched signaling connection through the PDP context when existing the WLAN (0056, 0071).

Regarding claims 7, 10, Sundar teaches a method as recited in claim 1, further comprising the step of :
controlling the loading of cellular cells by shifting user traffic service to WLANs (0055, 0056).

Regarding claim 8, Sundar teaches a method as recited in claim 1, wherein the interworking between the cellular network and the WLAN is provided by:
uniquely identifying the WLAN as a routing area of the cellular network; and
once identified, setting a routing area update timer to reduce a number of routing area updates to the cellular network (0071, 0092).

Regarding claim 9, 15, Sundar fails to teach a method as recited in claim 1, wherein the step of maintaining the PDP context includes maintaining the PDP context to reduce handoff delay while re-entering the UMTS network. However, Huttra teaches a method as recited in claim 1, wherein the step of maintaining the PDP context includes maintaining the PDP context to reduce handoff delay while re-entering the UMTS network (0068). In case of handover, the new SGSN may check the APN OI received from the old SGSN in the PDP context information. This OI is used according to FIG. 3 starting from step 33. The result will be maintaining the PDP context instead of sending it to the corresponding GGSN (S38), or deleting the PDP context instead of rejecting the request (S39) (0068). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of

Hurtta with Sundar, in order to provide battery conservation by reducing extra signaling, while seamlessly roaming between different networks.

Regarding claim 10, Sundar teaches a method as recited in claim 1, further comprising the step of enabling cellular service providers to control the loading of cells by shifting users to WLANs by changing routing area identifiers of the users to that of a WLAN coverage area (0014, 0071, 0092).

Regarding claim 13, Sundar teaches a system as recited in claim 11, further comprising a unique routing area identifier, which identifies the WLAN in the cellular network (0095).

Regarding claim 16, Sundar teaches a system as recited in claim 11, wherein the cellular network includes a Universal Mobile Telecommunications System (UMTS) (0098).

Regarding claim 18, Sundar teaches a system as recited in claim 11, wherein the cellular network learns if a user is in a WLAN coverage area via a routing area identifier (RAI) update message (0020-0027).

Response to Arguments

2. Applicant's arguments filed 7/31/09 have been fully considered but they are not persuasive.

In response to the applicant's argument that "nowhere in Hurrita show "maintaining packet data protocol (PDP) context while servicing the request using external network that inter-working with the cellular network is provide"

The object of Hurrita is achieved by a method of establishing a connection in a packet data network system from serving means to an external network via one of a plurality of gating means, the method comprising the steps of: The access point may be indicated by an APN of the GPRS/UMTS system or by any other identifiers (domain names, IP addresses and subnetwork addresses). [0068] In case of handover, the new SGSN may check the APN OI received from the old SGSN in the PDP context information. This OI is used according to FIG. 3 starting from step 33. The result will be maintaining the PDP context instead of sending it to the corresponding GGSN (S38), or deleting the PDP context instead of rejecting the request (S39).

The Examiner asserts that while maintaining the PDP context, the mobile handover, and the connection is maintained seamlessly, therefore, the system can handle different kinde of service as requested. Hurrita removes the unnecessary restriction to use a GGSN only in the home or visited network in both GPRS and UMTS. Handovers between operators can be handled, and, thus, the case can be handled in which the

SGSN, GGSN and HLR are located in different PLMNs. Another implementation consists in having the decision to accept the PDP context made in an external server instead of the GGSN, such as a RADIUS server. In this case the RADIUS server needs to have access to the configured information as described above and implement the same logic.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

1. **Any responses to this action should be mailed to:**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELODY MEHRPOUR whose telephone number is 5(571)272-7913. The examiner can normally be reached on Mon-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached (571) 272-7023.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Naghmeh Mehrpour/

Primary Examiner, Art Unit 2617

Nov 09, 2009